

AMENDMENTS TO THE ABSTRACT:

~~The present invention relates to a method of marking solid or liquid substances with nucleic acid for anti-counterfeiting and authentication, specifically to a method for marking solid or liquid substances with nucleic acid dissolved in a water-insoluble medium. A method of marking a solid article or substance includes the steps of dissolving a water-insoluble medium in a first solvent to form a first mixture, mixing a nucleic acid solution with an intermediate solution to form a second mixture, mixing the second mixture with the first mixture to form a homogenous third mixture, marking the article or substance with the third mixture containing the nucleic acid; and drying the marked article or substance.~~ Through the addition of an intermediate solution, the miscibility between the nucleic acid solution and the medium is increased and ~~forms~~ a homogenous solution is formed. For marking solid substances or articles, the water-insoluble medium containing known nucleic acid taggants is spread on the target solid substances or articles. ~~After drying, nucleic acids protected by the water-insoluble medium adhere on surface of the object.~~ For marking liquid, the target liquid is mixed with the water-insoluble media containing known nucleic acid taggants. As a result, the target liquid is labeled with nucleic acid.